



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/559,693      | 04/27/2000  | Alexander C. Ranous  | 10002147            | 3052             |

22879 7590 04/24/2003

HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER

BURGESS, BARBARA N

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2157

DATE MAILED: 04/24/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/559,693

Applicant(s)

RANOUS ET AL.

Examiner

Barbara N Burgess

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-8, 11-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Skinner et al. (hereinafter "Skinner", 5,963,914).

As per claims 1, 11, 21, Skinner discloses a network usage system having multiple level distributed data storage system, the system comprising:

- A set of first level network data collectors, wherein each first level network data collector receives network accounting data from a network data source, processes and stores the network accounting data at the first level network data collector

(column 3, lines 45-52, 57-67, column 4, lines 1-14, 24-28, 33-38, 54-57, 61-67, column 5, lines 31-34, column 7, lines 19-27, 33-34, column 10, lines 29-36, column 16, lines 42-45);

- A set of second level network data collectors, wherein second level network data collector receives processed network accounting data from one or more first level data collectors, processes and stores the network accounting data at the second level network data collector (column 3, lines 45-52, 57-67, column 4, lines 1-14, 24-28, 33-38, 54-57, 61-67, column 5, lines 31-34, column 7, lines 19-27, 33-34, column 10, lines 29-36, column 16, lines 42-45).

As per claims 2 and 22, discloses:

- A third level network data collector, wherein third level network data collector receives processed network accounting data from first level data collectors, second level data collector, processes and stores the network accounting data at the third level network data collector (column 3, lines 45-52, 57-67, column 4, lines 1-14, 24-28, 33-38, 54-57, 61-67, column 5, lines 31-34, column 7, lines 19-27, 33-34, column 10, lines 29-36, column 16, lines 42-45).

As per claims 3 and 23, discloses:

- An application interface which receives processed network accounting data from the first level network data collector, the second level network data collector, or the third level network data collector (column 3, lines 45-52, 57-67, column 4, lines 1-14, 24-

28, 33-38, 54-57, 61-67, column 5, lines 31-34, column 7, lines 19-27, 33-34, column 10, lines 29-36, column 16, lines 42-45).

As per claims 4 and 24, discloses:

- The first level network data collector includes a query manager, and the second level network data collector is in communication with the first level network data collector via the query manager (column 3, lines 48-51, column 4, lines 35-38, 44-51).

As per claims 5 and 25, discloses:

- The first level network data collector converts the network accounting data to a standard data format (column 4, lines 14-24).

As per claim 6, discloses:

- Each first level network data collector includes a first level data storage system and the second level network data collector includes a second level data storage system, for the storing processed network accounting data (column 3, lines 45-52, 57-67, column 4, lines 1-14, 24-28, 33-38, 54-57, 61-67, column 5, lines 31-34, column 7, lines 19-27, 33-34, column 10, lines 29-36, column 16, lines 42-45).

As per claims 7 and 26, discloses:

- The first level data storage system and the second level data storage system each include a processed data storage location, a metadata storage location and an error

Art Unit: 2157

recovery information storage location, wherein the processed network accounting data is stored at the processed data storage location (column 11, lines 30-35, column 12, lines 22-29, column 14, lines 50-56).

As per claims 8 and 27, discloses:

- After storing of the processed network accounting data, corresponding metadata is transferred to the metadata storage location and error recovery information is transferred to the error recovery information location (column 11, lines 30-35, column 12, lines 22-29, column 14, lines 50-56).

As per claim 12, discloses:

- An aggregator collector including a fourth encapsulator, a fourth aggregator, and a fourth data storage system, wherein the fourth encapsulator is in communication with the third data storage system (column 3, lines 45-52, 57-67, column 4, lines 1-14, 24-28, 33-38, 54-57, 61-67, column 5, lines 31-34, column 7, lines 19-27, 33-34, column 10, lines 29-36, column 16, lines 42-45).

As per claim 13, discloses:

- The first data collector receives network data from a network data source, and wherein the first aggregator processes the network data (column 3, lines 45-52, 57-67, column 4, lines 1-14, 24-28, 33-38, 54-57, 61-67, column 5, lines 31-34, column 7, lines 19-27, 33-34, column 10, lines 29-36, column 16, lines 42-45).

As per claim 14, discloses:

- Processing of the network data includes the process of performing data reduction on the network (column 4, lines 14-24).

As per claim 15, discloses:

- The first data collector receives network data from a network data source, and wherein the first encapsulator converts the network data to a standard data format (column 4, lines 14-24).

As per claim 16, discloses:

- First aggregator processes the network data providing aggregated data, and wherein the first aggregator includes a defined data transfer interval such that the first aggregator transfers the aggregated data to the first data storage system at the data transfer interval (column 3, lines 45-52, 57-67, column 4, lines 1-14, 24-28, 33-38, 54-57, 61-67, column 5, lines 31-34, column 7, lines 19-27, 33-34, column 10, lines 29-36, column 16, lines 42-45).

As per claim 17, discloses

- Wherein the data correlator collector includes a defined query interval, wherein the third encapsulator queries the first data storage system for the aggregated data at the query interval (column 3, lines 48-51, column 4, lines 35-38, 44-51).

As per claim 18, discloses

- Data transfer interval is a multiple of the query interval (column 3, lines 48-51, column 4, lines 35-38, 44-51).

As per claim 19, discloses

- The first data storage system includes an aggregated data storage location, a metadata storage location, and an error recovery information storage location, wherein the aggregated data is stored at the aggregated data storage location (column 3, lines 45-52, 57-67, column 4, lines 1-14, 24-28, 33-38, 54-57, 61-67, column 5, lines 31-34, column 7, lines 19-27, 33-34, column 10, lines 29-36, column 16, lines 42-45).

As per claim 20, discloses:

- After transfer of the aggregated data to the first data storage system, corresponding metadata is transferred to the metadata storage location and error recovery information is transferred to the error recovery information location (column 11, lines 30-35, column 12, lines 22-29, column 14, lines 50-56).



Art Unit: 2157

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9-10, 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skinner et al. (hereinafter "Skinner", 5,963,914) in view of Dyer et al. (hereinafter "Dyer", 4,361,877).

As per claims 9 and 28, Skinner does not explicitly disclose:

- The first level data storage system includes a first level aging policy, wherein network accounting data is removed from the first level data storage system after a time period corresponding to the first level aging policy.

However, in an analogous art, Dyer discloses removing data after it has been stored for a predetermined period of time (Abstract).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate a first level aging policy in Skinner's method in order to conserve storage space and make room for new, more current data.

As per claims 10 and 29, does not explicitly disclose:

- The second level data storage system includes a second level aging policy different from the first level aging policy, wherein the network accounting data is removed from the second level data storage system after a time period corresponding to the second level aging policy.

However, in an analogous art, Dyer discloses removing data after it has been stored for a predetermined period of time (Abstract).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate a first level aging policy in Skinner's method in order to conserve storage space and make room for new, more current data.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara N Burgess whose telephone number is (703) 305-3366. The examiner can normally be reached on M-F (8:00am-4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Ettinene can be reached on (703) 308-7562. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Application/Control Number: 09/559,693

Page 10

Art Unit: 2157

Barbara N Burgess  
Examiner  
Art Unit 2157

\*\*\*

April 21, 2003

  
MOUSTAFA M. MEKY  
PRIMARY EXAMINER